Biotest

*From Nature for Life*

# Biotest Microbiology

Product List
2010

HYCON RCS Microbial Air Sampler
HYCON Agar Strips and Contact Slides
HYCON APC Airborne Particle Counters
Biotest Molecular Microbiology (MMB)
Service, Repair and Calibration

# DET NORSKE VERITAS

# MANAGEMENT SYSTEM CERTIFICATE

**Certificate No.: 31940-2008-AQ-GER-TGA**

*This is to certify that*

**GBU (Global Business Unit)**
**Mikrobiologie der Biotest AG**

**with the sites**

**Landsteinerstr. 5**
**63303 Dreieich - Germany**

**Wernher-von-Braun-Str. 9**
**69214 Eppelheim - Germany**

*has been found to conform to the Management System Standard*

**ISO 9001:2008**

*This certificate is valid for the following product or service ranges:*

**Development, production and sales of culture media, instruments and molecular biological test systems for hygiene control and microbiological testing**

*Initial Certification date:*
21.07.2009

*This certificate is valid until:*
20.07.2012

*The audit has been performed under the supervision of*

Dr. Beatrix Michels-Hatzfeld
*Lead Auditor*

Deutscher Akkreditierungs Rat
DAR
**TGA-ZM-04-92-00**

*Place and date:*
Essen, 21.07.2009

*for the Accredited Unit:*
DNV ZERTIFIZIERUNG UND UMWELTGUTACHTER GMBH

Nikolaus Kim
*Management Representative*

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.
DNV Zertifizierung und Umweltgutachter GmbH, Schnieringshof 14, 45329 Essen, Tel: +49 201 7296 300 Fax: +49 201 7296 333 - www.dnv.de/zertifizierung

*Biotest is a pharmaceutical, biotherapeutic and industrial microbiology company involved in research and production, specializing in the application areas of immunology and hematology.*

*In the Pharmaceutical segment Biotest develops and markets immunoglobulins, coagulation factors and albumins derived from human blood plasma fractionation. These are used to treat diseases of the immune and hematopoietic systems.*

*In the Biotherapeutic segment Biotest promotes the clinical development of monoclonal antibodies, including those used to treat rheumatism and leukemia.*

*The industrial microbiology segment includes reagents and systems for microbiology such as those used for hygiene monitoring and microbial identification.*

*Biotest employs approximately 2,000 people worldwide. Shares of Biotest AG are listed on the SDAX of the German Stock Exchange (Deutsche Börse).*

# Contents


*About Biotest* *iii*

*Contents* *iv*

## *Microbial Air Sampling*

*HYCON RCS Microbial Air Samplers* *1*

RCS High Flow 1

RCS Isolator 4

RCS Plus / RCS Plus EX 6

RCS Standard 8

*Agar Media for RCS Instruments* *9*

HYCON Agar Strips 9

## *Agar Media for Surface Sampling*

*HYCON Contact Slides* *11*

## *Airborne Particle Counting*

*HYCON APC Airborne Particle Counters* *13*

APC M3 13

APC Ergo Touch 15

APC Handheld 18

APC Portable 20

## *Biotest Molecular Microbiology (MMB)*

MMB Food Pathogen System 21

Hygiene Screening System (HSS) 23

## *Miscellaneous*

Service, Repair and Calibration 24

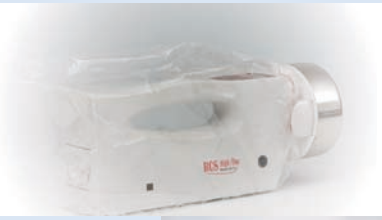
Contact Information 25

General Terms and Conditions of Biotest AG 26

## HYCON RCS High Flow Microbial Air Sampler

| Item | | Item No. | |
|---|---|---|---|
| **Instrument** | | | |
| **RCS High Flow Microbial Air Sampler**<br>High-performance instrument for multiple sample volumes up to 1,999 liters and a flow rate of 100 L/min; includes two rechargeable 9.6 V Ni-Cd batteries, rotor, protection cap, RCS Management Software, serial cable and carry case; contains a Bluetooth module for wireless data transmission of sample data to an external PC | | 940 216 | |
| **Accessories** | | | |
| **Universal Rapid Battery Charger**<br>For rapid charging of 9.6 V and 7.2 V Ni-Cd batteries (compatible with RCS Plus) | 220 V (EU)<br>110 V (US) | 940 370<br>940 371 | |
| **9.6 V Ni-Cd Battery**<br>Ni-Cd replacement battery for uninterrupted use of the RCS High Flow Microbial Air Sampler | | 940 275 | |
| **Battery Discharger**<br>For complete discharging of the residual capacity of 9.6 V and 7.2 V batteries; reconditions and prevents battery memory effects (compatible with RCS Plus) | | 940 380 | |
| **Power Supply**<br>For continuous operation of RCS High Flow | 230 / 240 V (EU)<br>110 V (US) | 940 270<br>940 271 | |
| **Tripod**<br>For convenient use of the RCS High Flow at heights up to three meters (compatible with RCS Plus) | | 940 330 | |
| **Table-top Tripod**<br>For horizontal operation of the RCS High Flow Microbial Air Sampler on smooth surfaces to minimize vibrations (compatible with RCS Isolator and RCS Plus) | | 940 335 | |
| **Table-top Stand for RCS High Flow**<br>For vertical use of the RCS High Flow; prevents accidental damage | | 940 920 | |
| **RCS Compressed Gas Adapter**<br>Autoclavable adapter for use of the RCS High Flow to monitor microorganisms in compressed gasses; designed for pressure of 1 bar (compatible with RCS Isolator) | | 940 720 | |
| **Nozzle Set for RCS Compressed Gas Adapter**<br>Set of five nozzles to extend the inlet pressure range to 0.1 - 7.0 bar | | 940 725 | |
| **Rotor**<br>Autoclavable spare rotor (compatible with RCS Isolator)<br>Each combination of sampler and rotor must be calibrated separately. | | 940 230 | |
| **Protection Cap**<br>Autoclavable, stainless steel protection cap (compatible with RCS Isolator and RCS Plus) | | 940 415 | |

## HYCON RCS High Flow Microbial Air Sampler

| Item | Item No. | |
|---|---|---|
| **Air Outlet Ring**<br>Autoclavable spare part | 940 244 | |
| **Sterile Sleeves**<br>10 pieces; for covering the RCS High Flow to protect against cross contamination (compatible with RCS Plus) | 940 250 |  |
| **Anemometer**<br>Portable airflow measuring device for calibrating RCS Microbial Air Samplers (compatible with RCS Isolator and RCS Plus) | 940 320 | |
| **CalibSo**<br>Calibration Software for secure and simple computer-aided calibration and data backup (compatible with RCS Isolator) | 940 321 | |
| **Anemometer plus CalibSo**<br>Special price combination available only in selected markets | 940 320 900 | |
| **Adhesive Tapes**<br>60 pieces, for calibration of the RCS High Flow, adhesive ring foils to seal the air intake holes in the rotor (compatible with RCS Isolator and RCS Plus) | 940 325 | |
| **HYCON ID Set**<br>Complete solution for wireless identification and documentation of microbial air sampling data, with barcode reader, bluetooth module and software | 940 360 | |
| **HYCON ID USB Barcode Reader**<br>Barcode scanner with USB connection for reading barcode data in the laboratory (such as after incubation) | 940 368 | |
| **HYCON ID Barcode Printer Set**<br>Including software and labels to create user-specific barcode labels | 940 365 | |

## HYCON RCS High Flow Microbial Air Sampler

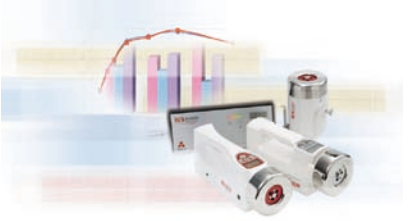
| Item | | Item No. |
|---|---|---|
| **HYCON ID Bluetooth Barcode Reader**<br>For the extension of the HYCON ID System to work with additional RCS High Flows; includes bluetooth scanner and battery | | 940 361 |
| **HYCON ID Battery Charger**<br>Additional charger for charging bluetooth barcode scanners | | 940 362 |
| **RCS Validation Handbook**<br>Comprehensive compendium of validation data for the RCS Microbial Air Samplers (RCS High Flow, RCS Isolator, RCS Plus) and Agar Strips, contains Qualification Handbook for the RCS High Flow | (German)<br>(English) | 940 100<br>940 130 |
| **RCS Qualification Handbook**<br>For performing complete IQ, OQ and PQ of the RCS High Flow | (German)<br>(English) | 940 105<br>940 135 |
| **Battery Compartment Key**<br>Only for RCS High Flows manufactured prior to 2001 (compatible with RCS Plus) | | 940 450 |
| **Infrared Remote Control**<br>Only for RCS High Flow with item number 940 215 and serial numbers lower than 38001 (compatible with RCS Isolator) | | 940 241 |

## HYCON RCS Isolator Microbial Air Sampler

| Item | Item No. | |
|---|---|---|
| **Instrument** | | |
| **RCS Isolator Microbial Air Sampler**<br>Stationary instrument with encapsulated airflow path to be used in Isolators and under laminar flow devices or filling lines; sample volumes up to 1,999 liters with a flow rate of 100 L/min; including sampling unit, operating unit, connection cable with secured plug, rotor, protection cap, infrared remote control and carrying case | 940 810 | |
| **Accessories** | | |
| **Universal Battery Charger**<br>For charging the built-in 12 V NiMH battery | 940 820 | |
| **Support Stand for Sampling Unit**<br>Stainless steel tripod for vertical affixation of sampling unit | 940 816 | |
| **Tripod**<br>For convenient use of the RCS Isolator at heights up to three meters (compatible with RCS Standard); an adapter for connection with the tripod is required | 940 030 | |
| **Tripod Adapter**<br>For affixing the RCS Isolator to tripods or installations | 940 817 | |
| **Table-top Tripod**<br>For horizontal operation of the RCS Isolator Microbial Air Sampler (compatible with RCS High Flow and RCS Plus) | 940 335 | |
| **Infrared Remote Control**<br>For convenient use of RCS Isolator (compatible with RCS High Flow, Item No. 940 215 and serial number up to 38000) | 940 241 | |
| **Sampling Unit**<br>For replacement at an existing installation | 940 813 | |
| **Rotor**<br>Autoclavable spare rotor (compatible with RCS High Flow)<br>Each combination of sampler and rotor must be calibrated separately. | 940 230 | |
| **Protection Cap**<br>Autoclavable, stainless steel protection cap (compatible with RCS High Flow and RCS Plus) | 940 415 | |
| **Air Outlet Tubing**<br>PVC outlet air tube to redirect the exhausted air into less critical areas | 940 814 | |
| **Tri-Clamp Cable Transfer**<br>For use in isolators, to connect the operating unit to the sampling unit through the isolator wall | 940 815 | |

## HYCON RCS Isolator Microbial Air Sampler

| Item | | Item No. |
|---|---|---|
| **Alternative Cable Transfer** | | 940 818 |
| **Anemometer**<br>Portable airflow measuring device for calibrating RCS Microbial Air Samplers (compatible with RCS High Flow and RCS Plus) | | 940 320 |
| **CalibSo**<br>Calibration Software for secure and comfortable computer-aided calibration and data backup (compatible with RCS High Flow) | | 940 321 |
| **Anemometer plus CalibSo**<br>Special price combination available only in selected markets | | 940 320 900 |
| **Adhesive Tapes**<br>60 pieces, for calibration of the RCS High Flow, adhesive ring foils to seal the air inlet holes in the rotor (compatible with RCS High Flow and RCS Plus) | | 940 325 |
| **RCS Compressed Gas Adapter**<br>Autoclavable adapter for use of the RCS High Flow to monitor microorganisms in compressed gasses; designed for pressure of 1 bar (compatible with RCS High Flow) | | 940 720 |
| **Nozzle Set for RCS Compressed Gas Adapter**<br>Set of five nozzles to extend the inlet pressure range to 0.1 - 7.0 bar | | 940 725 |
| **RCS Validation Handbook**<br>Comprehensive compendium of validation data for the RCS Microbial Air Samplers (RCS High Flow, RCS Isolator, RCS Plus) and Agar Strips | (German)<br>(English) | 940 100<br>940 130 |



## HYCON RCS Plus Microbial Air Sampler

| Item | | Item No. | |
|---|---|---|---|
| *Instrument* | | | |
| **RCS Plus Ex Microbial Air Sampler**<br>For use in explosive areas; high-performance instrument for multiple sample volumes up to 1,999 liters and a flow rate of 50 L/min; including two rechargeable 7.2 V Ni-Cd batteries, infrared remote control, battery compartement key, rotor, protection cap and carrying case | | 940 312 | |
| *Accessories* | | | |
| **Universal Rapid Battery Charger**<br>For rapid charging of 9.6 V and 7.2 V Ni-Cd batteries (compatible with RCS High Flow) | 220 V (EU)<br>110 V (US) | 940 370<br>940 371 | |
| **7.2 V Ni-Cd Battery**<br>Replacement Ni-Cd battery for uninterrupted use of the RCS High Flow Microbial Air Sampler | | 940 375 | |
| **Battery Discharger**<br>For complete discharging of the residual capacity of 9.6 V and 7.2 V batteries; reconditions and prevents battery memory effects (compatible with RCS High Flow) | | 940 380 | |
| **Tripod**<br>For convenient use of the RCS Plus at heights up to three meters (compatible with RCS High Flow) | | 940 330 | |
| **Table-top Tripod**<br>For horizontal operation of the RCS Plus/ RCS Plus Ex Microbial Air Samplers (compatible with RCS Isolator and RCS High Flow) | | 940 335 | |
| **Rotor**<br>Autoclavable spare rotor (only for RCS Plus with serial numbers up to 4999; each combination of sampler and rotor must be calibrated separately.) | | 940 410 | |
| **Rotor**<br>Autoclavable spare rotor (only for RCS Plus with serial numbers as of 5000; each combination of sampler and rotor must be calibrated separately.) | | 940 411 | |
| **Protection Cap**<br>Autoclavable, stainless steel protection cap (compatible with RCS Isolator and RCS High Flow) | | 940 415 | |

## HYCON RCS Plus Microbial Air Sampler

| Item | | Item No. | |
|---|---|---|---|
| **Sterile Sleeves**<br>10 pieces; for covering the RCS Plus / RCS Plus Ex to protect against cross contamination (compatible with RCS High Flow) | | 940 250 | |
| **Anemometer**<br>Portable airflow rate measuring device for calibrating RCS Microbial Air Samplers RCS Plus / RCS Plus Ex (compatible with RCS Isolator and RCS High Flow) | | 940 320 | |
| **Adhesive Tapes**<br>60 pieces, for calibration of the RCS High Flow, adhesive ring foils to seal the air inlet holes in the rotor (compatible with RCS Isolator and RCS High Flow) | | 940 325 | |
| **RCS Validation Handbook**<br>Comprehensive compendium of validation data for the RCS Microbial Air Samplers (RCS High Flow, RCS Isolator, RCS Plus) and Agar Strips | (German)<br>(English) | 940 100<br>940 130 | |
| **Battery Compartment Key**<br>(compatible with RCS High Flow with manufacturing date before 2001) | | 940 450 | |
| **Infrared Remote Control**<br>Only for RCS Plus with serial number up to 4999 | | 940 340 | |
| **Infrared Remote Control**<br>Only for RCS Plus with serial number greater than 4999 (compatible with RCS Standard) | | 940 341 | |

## HYCON RCS Standard Microbial Air Sampler

| Item | Item No. |
|---|---|
| **Instrument** | |
| **RCS Standard Microbial Air Sampler**<br>Instrument for use in unclassified areas; multiple sample volumes up to 320 liters and a separation volume of 40 L/min; including four D-batteries, plastic protection cap and carrying case | 940 015 |
| **Accessories** | |
| **Power Supply 110 / 230 / 240 V**<br>For continuous operation of the RCS Standard | 940 042 |
| **Tripod**<br>For convenient use of the RCS Standard at heights up to three meters (compatible with RCS Isolator) | 940 030 |
| **Infrared Remote Control**<br>Only for RCS Standard with serial number as of 25000 (compatible with RCS Plus with serial number greater than 4999) | 940 341 |
| **Replacement Impeller Drum**<br>matte | 940 511 |
| **Replacement Impeller Blade** | 940 500 |
| **Floor Plate**<br>For use of RCS Standard in an upright position | 942 020 |
| **Sterile Sleeves**<br>10 pieces; for covering the RCS Standard to protect against cross contamination | 940 050 |
| **Calibration Set**<br>For verifying and correcting the angle of the Impeller Blade, recommended at least once a week | 940 060 |

## HYCON Agar Strips – agar media for RCS Microbial Air Samplers

| Item | Item No. | Package size |
|---|---|---|
| *Total Count* | | |
| **TC**<br>Tryptic Soy Agar for determination of the total count | 941 105 | 50 |
| **TSM**<br>Modified Tryptic Soy Agar with neutralizers against disinfectants and growth supplements; for identification of the total count of fastidious and sublethally damaged microorganisms | 941 135 | 50 |
| **TC-γ**<br>Gamma-irradiated Tryptic Soy Agar, double-wrapped; for determination of total count in aseptic environments | 941 115 | 40 |
| **TCI-γ**<br>Gamma-irradiated Tryptic Soy Agar with neutralizers, double-wrapped; for determination of total count in aseptic environments and in peroxide-containing air | 941 125 | 40 |
| **PEN-γ**<br>Gamma-irradiated Tryptic Soy Agar with Penase; for determination of total count in penicillin-containing air in aseptic environments | 941 716 | 40 |
| **LAC-γ**<br>Gamma-irradiated Tryptic Soy Agar with broad-spectrum cephalosporinase for determination of total count in aseptic environments containing antibiotics | 941 706 | 40 |
| *Selective Agar Media* | | |
| **YM**<br>Rose Bengal Agar with streptomycin; for determination of yeasts and molds | 941 196 | 50 |
| **SDX**<br>Sabouraud Dextrose Agar with modified Pharmacopeia formulation; for determination of yeasts and molds | 941 205 | 50 |
| **SDX-γ**<br>Sabouraud Dextrose Agar with modified Pharmacopeia formulation; for determination of yeasts and molds in aseptic environments | 941 215 | 40 |

## HYCON Agar Strips – agar media for RCS Microbial Air Samplers

| Item | Item No. | Package size |
|---|---|---|
| **DG-18**<br>Dichloran Glycerine Agar; for determination of yeasts and molds (compliant with TRBA 430) | 941 225 | 25 |
| **S**<br>Mannitol Salt Agar; for determination of staphylococci | 941 405 | 25 |
| **C**<br>MacConkey Agar; for determination of coliform bacteria | 941 505 | 25 |

### Accessories

| | | |
|---|---|---|
| **Blank Strip Kit**<br>Sterile empty strips for manual production of culture media for special applications | 941 605 | 50 |
| **Cover Slides**<br>Cover slide for Agar Strips to prevent desiccation during incubation | 941 900 | 100 |
| **Incubation Rack for Agar Strips** | 940 941 | 1 |
| **Safety Tweezer Holder** | 940 910 | 1 |

## HYCON Contact Slides – agar media for microbial surface monitoring; in flexible foil, individually packaged, 25 cm²

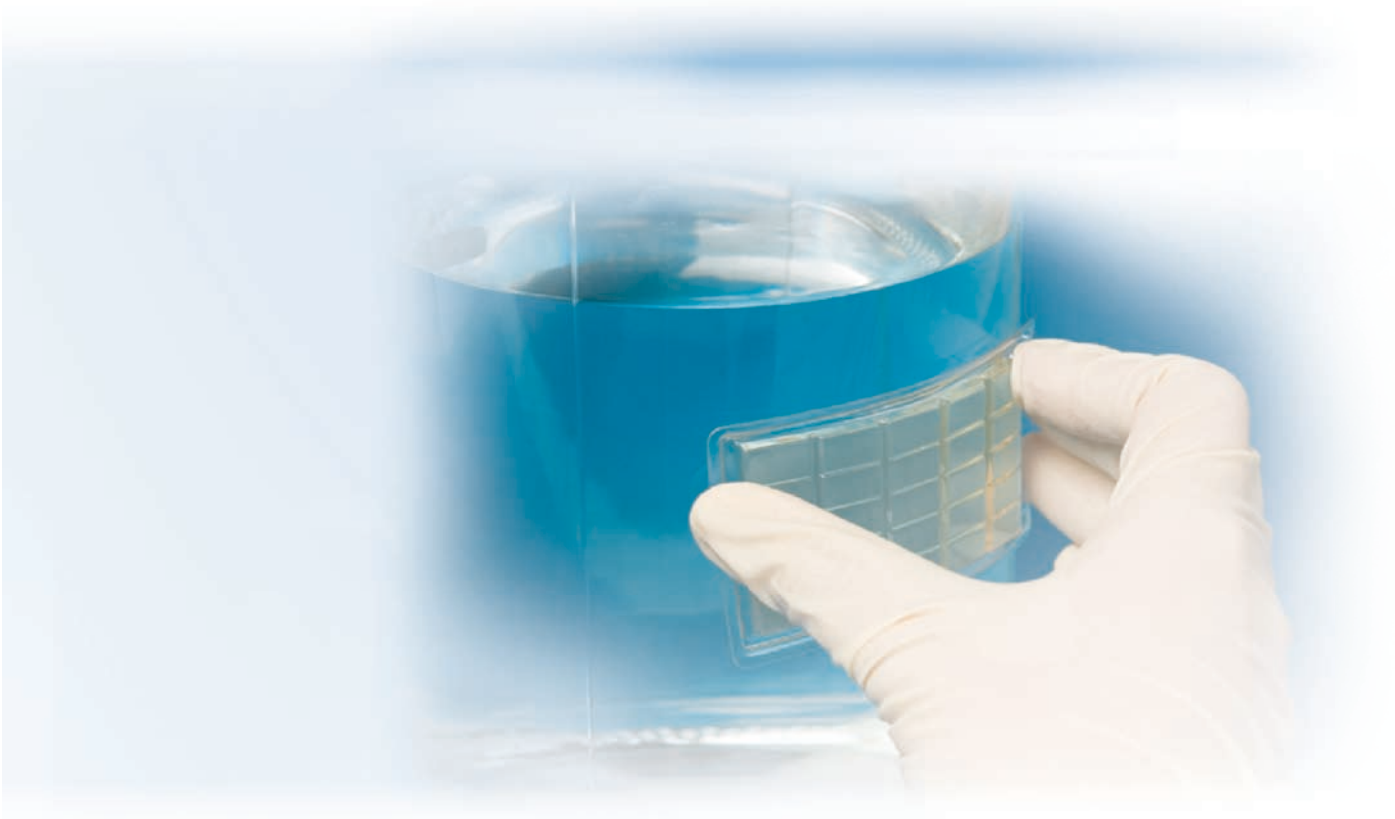
| Item | Item No. | Package size |
|---|---|---|
| **Total Count** | | |
| **TC**<br>Tryptic Soy Agar; for determination of the total count; with neutralizers<br>Lecithin, L-Histidine, Sorbitol Monooleate Complex, Tween 80)<br>and growth supplements | 931 250 020<br>931 250 100 | 20<br>100 |
| **TC-γ**<br>Gamma-irradiated Tryptic Soy Agar, double-wrapped;<br>for determination of total count in aseptic environments; with neutralizers<br>(Lecithin, Sorbitol Monooleate Complex, Tween 80) and growth supplements | 931 255 020<br>931 255 100 | 20<br>100 |
| **DE-γ**<br>Gamma-irradiated, modified Dey Engley Agar (D/E Agar), double-wrapped;<br>for determination of total count in aseptic environments; with neutralizers<br>(Lecithin, Sorbitol Monooleate Complex, Sodium Thioglycolate, Sodium Bisulfite)<br>and growth supplements | 931 256 020<br>931 256 100 | 20<br>100 |
| **PEN-γ**<br>Gamma-irradiated Tryptic Soy Agar with Penase, double-wrapped;<br>for determination of total count in penicillin-containing air;<br>with neutralizers (Lecithin, L-Histidine, Sorbitol Monooleate Complex,<br>Tween 80) and growth supplements | 931 296 100 | 100 |
| **LAC-γ**<br>Gamma-irradiated Tryptic Soy Agar with broad-spectrum cephalosporinase, double-wrapped;<br>for determination of total count in environments containing antibiotics;<br>with neutralizers (Lecithin, L-Histidine, Sorbitol Monooleate Complex,<br>Tween 80) and growth supplements | 931 291 100 | 100 |
| **Selective Agar Media** | | |
| **B**<br>Sheep Blood Agar; for determination of total count of<br>fastidious and pathogenic microorganisms | 931 260 020 | 20 |
| **YM**<br>Rose Bengal Agar with streptomycin and chloramphenicol;<br>for determination of yeasts and molds; with growth supplements | 931 280 020 | 20 |
| **SDX**<br>Sabouraud Dextrose Agar with modified Pharmacopeia formulation;<br>for determination of yeasts and molds; with neutralizers<br>(Tween 80, L-α-Phosphatidylcholine) and growth supplements | 931 284 020<br>931 284 100 | 20 |

## HYCON Contact Slides – agar media for microbial surface monitoring; in flexible foil, individually packaged, 25 cm²

| Item | Item No. | Package size |
|---|---|---|
| **SDX-γ**<br>Gamma-irradiated Sabouraud Dextrose Agar with modified Pharmacopeia formulation, double-wrapped; for determination of yeasts and molds in aseptic environments; with neutralizers; (Tween 80, L-α-Phosphatidylcholine) and growth supplements | 931 285 020 | 20 |
| **C**<br>MacConkey Agar; for determination of coliform bacteria; with growth supplements | 931 270 020 | 20 |

### Accessories

| | | |
|---|---|---|
| **Blank Strip Kit**<br>Sterile empty strips for manual production of culture media for special applications | 931 200 020 | 20 |
| **Incubation Rack for Contact Slides** | 940 946 | 1 |
| **Safety Tweezer Holder** | 940 910 | 1 |



## HYCON APC M3 Airborne Particle Counter

### Instruments

**APC M3 Airborne Particle Counter**

High-performance instrument for multiple sample volumes up to 1 m³

- Flow rate 100 / 75 / 50 L/min
- 2 or 6 channels from 0.3 to 10 µm
- Stainless steel or aluminum case
- Integrated thermal printer
- Calculations according to ISO 14644 and FS 209 E
- Touchscreen display
- Meets JIS standards
- User-defined warning signals
- Self diagnostics of flow rate and battery charge level
- USB Client and RS-232 data ports
- Weight 8.2 to 10.2 kg
- Custumer-specific channel sizes from 0.3 to 100 µm (for P56xxx model numbers)

Includes power supply, isokinetic probe, sample tubing, table-top tripod, USB cable, APCOne Data Download Utility Software (CD), user manual (CD)

| Model number | Flow rate (L/min) | Minimum sensitivity (µm) | Number of channels | Housing | Item No. |
|---|---|---|---|---|---|
| P36100 S | 100 | 0.3 | 6 | Stainless steel | 942 260 |
| P36100 | 100 | 0.3 | 6 | Aluminum | 942 262 |
| P56100 S | 100 | 0.5 (0.3) | 6 | Stainless steel | 942 264* |
| P56100 | 100 | 0.5 (0.3) | 6 | Aluminum | 942 266* |
| P52100 S | 100 | 0.5 | 2 | Stainless steel | 942 268 |
| P52100 | 100 | 0.5 | 2 | Aluminum | 942 270 |
| P36075 S | 75 | 0.3 | 6 | Stainless steel | 942 272 |
| P36075 | 75 | 0.3 | 6 | Aluminum | 942 274 |
| P56075 S | 75 | 0.5 (0.3) | 6 | Stainless steel | 942 276* |
| P56075 | 75 | 0.5 (0.3) | 6 | Aluminum | 942 278* |
| P52075 S | 75 | 0.5 | 2 | Stainless steel | 942 280 |
| P52075 | 75 | 0.5 | 2 | Aluminum | 942 282 |
| P36050 S | 50 | 0.3 | 6 | Stainless steel | 942 284 |
| P36050 | 50 | 0.3 | 6 | Aluminum | 942 286 |
| P56050 S | 50 | 0.5 (0.3) | 6 | Stainless steel | 942 288* |
| P56050 | 50 | 0.5 (0.3) | 6 | Aluminum | 942 290* |
| P52050 S | 50 | 0.5 | 2 | Stainless steel | 942 292 |
| P52050 | 50 | 0.5 | 2 | Aluminum | 942 294 |

* additional charge for 0.3 µm sensitivity of model P56xxx

| *Item* | *Item No.* |
|---|---|

### Accessories

| | |
|---|---|
| **FMS Facility Monitoring System**<br>To control a network of particle counters<br>(compatible with APC Handheld and Portable models) | 942 017 |
| **Serial Interface Cable**<br>RS-232, 3 m (compatible with APC Portable) | 190 200 |
| **USB-Schnittstellenkabel** | 191 550 |

## HYCON APC M3 Airborne Particle Counter

| Item | Item No. |
|---|---|
| **Sample Tubing**<br>Per meter | 191 570 |
| **Table-top Tripod**<br>For isokinetic probe | 191 595 |
| **Thermal Printer Paper**<br>5 rolls, for APC M3 series | 942 112 000 |
| **Lithium Ion Battery, 14.4 V** | 191 560 |
| **External Battery Charger** | 942 254 |
| **Isokinetic Probe 100 L/min** | 942 436 |
| **Isokinetic Probe 75 L/min** | 942 437 |
| **Isokinetic Probe 50 L/min** | 942 438 |
| **Isokinetic Probe for HEPA filter testing, 100 L/min** | 191 520 |
| **Temperature and Relative Humidity Sensor** | 942 441** |
| **Air Velocity Probe** | 942 446** |
| **Differential Pressure Sensor** | 942 451** |
| **Carrying Case**<br>With wheels and handle | 942 456 000 |
| **Purge Filter Assembly** | 942 465 |
| **APC Compressed Gas Adapter**<br>Compatible with all APCs | 942 675 |
| **Nozzle Set for APC Compressed Gas Adapter, 100 L/min** | 942 650 |
| **Nozzle Set for APC Compressed Gas Adapter, 75 L/min** | 942 655 |
| **Nozzle Set for APC Compressed Gas Adapter, 50 L/min** | 942 660 |
| **APCOne11 Download Utility Software**<br>Compatible with 21CFR Part 11, including Download Utility Software (CD), APCOne11 security dongle, APCOne11 validation handbook | 942 700 |
| **APCOne11 Security Dongle** | 942 162 |
| **APCOne11 Download Utility Software** | 942 701 |
| **APC M3 Qualification Handbook**<br>For performing complete IQ, OQ and PQ of APC M3 particle counters, available in German and English | 942 207 |

**only in conjunction with new instrument or recalibration

## HYCON APC ErgoTouch Airborne Particle Counter

| Item | Item No. | |
|---|---|---|
| *Instrument* | | |
| **APC ErgoTouch Airborne Particle Counter**<br>Handheld particle counter with a flow rate of 2.83 L/min and three channels, 0.3 µm and 0.5 µm fixed and middle channel adjustable (0.5 / 1.0 / 2.0 / 2.5 µm); including power supply, battery, isokinetic inlet, purge filter assembly, USB cable, ErgoTrak Lite Data Download Utility (CD), operation manual (CD), Quick Start Guide | 942 500 | |
| **APC ErgoTouch Pro Airborne Particle Counter**<br>Handheld particle counter with a flow rate of 2.83 L/min and six channels, calibrated to 0.3 / 0.5 / 1.0 / 3.0 / 5.0 / 10.0 µm, user-configurable in 0.1 µm increments (0.3 to 10.0 µm); including power supply, battery, isokinetic inlet, stylus, purge filter assembly, USB cable, ErgoTrak Lite Data Download Utility (CD), operation manual (CD), Quick Start Guide | 942 550 | |
| *Accessories only for APC ErgoTouch* | | |
| **Spare Battery** | 942 511 | |
| **Replacement Power Supply** | 942 512 | |
| **Replacement USB Cable** | 191 550 | |
| **Aluminum Carrying Case** | 942 520 | |

## HYCON APC ErgoTouch Airborne Particle Counter

| Item | Item No. | |
|---|---|---|
| **Table-top Stand** | 940 930 | |

### Accessories only for APC ErgoTouch Pro

| | | |
|---|---|---|
| **Spare Battery** | 942 561 | |
| **Replacement Power Supply** | 942 562 | |
| **External Battery Charger** | 942 563 | |
| **Replacement USB Cable** | 191 551 | |
| **Temperature and Relative Humidity Probe** | 942 565 | |
| **Aluminum Carrying Case** | 942 570 | |
| **External Printer** | 942 610 | |
| **Printer Paper**<br>10 rolls | 942 611 | |
| **APC ErgoTouch Pro Qualification Handbook**<br>For performing complete IQ, OQ and PQ of APC ErgoTouch Pro Airborne Particle Counters, available in German and English | 942 507 | |

### Accessories for both Instruments

| | | |
|---|---|---|
| **Purge Filter Assembly** | 942 601 | |
| **Isokinetic Inlet** | 942 602 | |

## HYCON APC ErgoTouch Airborne Particle Counter

| Item | Item No. |
|---|---|
| **Isokinetic Probe**<br>For remote sampling | 942 603 |
| **Isokinetic Probe for HEPA filter testing, 2.83 L/min** | 191 520 |
| **Tubing**<br>For remote sampling, per meter | 191 822 |
| **Barbed Inlet**<br>For remote sampling | 191 824 |
| **APC Compressed Gas Adapter**<br>Compatible with all APCs | 942 675 |
| **Nozzle Set for APC Compressed Gas Adapter (ErgoTouch version)** | 942 680 |

## HYCON APC Handheld Airborne Particle Counter

### Instruments

**APC Handheld Airborne Particle Counter**

Handheld particle counters with a flow rate of 2.83 L/min and one, two or four channels

- APC 1 Channel (0.3 µm)
- APC 2 Channel (0.5 / 5.0 µm)
- APC Plus (0.3 / 0.5 / 1.0 / 5.0 µm)
- APC TEN (0.5 / 1.0 / 5.0 / 10.0 µm)

Includes power supply, battery, isokinetic inlet, RS-232 serial cable, APCWin Data Download Utility (CD), operation manual (CD), carrying case

| Model number | Flow rate (L/min) | Minimum sensitivity (µm) | Number of channels | Housing | Item No. |
|---|---|---|---|---|---|
| H3101 | APC 1 Channel | 0.3 | 1 | Aluminum | 942 001 |
| H5201 | APC 2 Channel | 0.5 | 2 | Aluminum | 942 005 |
| H5201 S | APC 2 Channel | 0.5 | 2 | Stainless steel | 942 006 |
| H5201 | APC 2 Channel RS-485 | 0.5 | 2 | Aluminum | 942 007 |
| H3401 | APC Plus | 0.3 | 4 | Aluminum | 942 300 |
| H3401 S | APC Plus | 0.3 | 4 | Stainless steel | 942 301 |
| H3401 | APC Plus RS-485 | 0.3 | 4 | Aluminum | 942 302 |
| H5401 | APC TEN | 0.5 | 4 | Aluminum | 942 310 |
| H5401 S | APC TEN | 0.5 | 4 | Stainless steel | 942 311 |

### Accessories

| *Item* | *Item No.* |
|---|---|
| **FMS Facility Monitoring System**<br>To control a network of particle counters (compatible with APC M3 and Portable models) | 942 017 |
| **Thermal Printer, 110 V** | 942 020 000 |
| **Thermal Printer, 220 V** | 942 022 000 |
| **Serial Cable**<br>RS-232, 3 m; for serial numbers as of xxxx-0999 | 190 200 |
| **Purge Filter Assembly, 0.2 µm** | 942 035 |
| **Remote Sample Probe and Tubing**<br>For remote sampling | 942 041 |
| **Isokinetic Probe for HEPA filter testing, 2.83 L/min** | 191 520 |
| **Table-top Tripod** | 942 050 |
| **Thermal Printer Paper**<br>5 rolls | 942 110 000 |
| **Universal Battery Charger** | 942 158 |
| **Isokinetic Inlet, 2.83 L/min** | 190 190 |
| **Carrying Case** | 190 210 |
| **Custom Wall Bracket** | 942 899 090 |

## HYCON APC Handheld Airborne Particle Counter

| Item | Item No. | |
|---|---|---|
| **APC Compressed Gas Adapter**<br>Compatible with all APC models | 942 675 | |
| **Nozzle Set for APC Compressed Gas Adapter, 2.83 L/min** | 942 670 | |
| **APCOne11 Download Utility Software**<br>Compatible with 21CFR Part 11, including Download Utility Software (CD), APCOne11 security dongle, APCOne11 validation handbook | 942 700 | |
| **APCOne11 Security Dongle** | 942 162 | |
| **APCOne11 Download Utility Software** | 942 701 | |
| **APC Handheld Qualification Handbook**<br>For performing complete IQ, OQ und PQ of APC Handheld Airborne Particle Counter, available in German and English | 942 107 | |

## HYCON APC Portable Airborne Particle Counter

| Item | Item No. |
|---|---|
| **Instrument** | |
| **Particle Counter APC Portable**<br>**Model number P3610**<br>Portable instrument for multiple sample volumes up to 10 ft3 (283 liters)<br>• Flow rate of 28.3 L/min<br>• 6 channels from 0.3 to 10 µm<br>• Aluminum housing<br>• Built-in thermal printer<br>• Calculations according to ISO 14644 and FS 209 E<br>• Touchscreen display<br>• Meets JIS standards<br>• User-defined warning signals<br>Includes power supply, internal battery, isokinetic probe, sample tubing, table-top tripod, RS-232 interface cable, APCOne Data Download Utility Software (CD), operation manual (CD) | 942 400 |

**Accessories**

| | |
|---|---|
| **FMS Facility Monitoring System**<br>To control a network of particle counters (compatible with APC M3 and Handheld models) | 942 017 |
| **HYTREL Tubing**<br>for remote sampling, per meter | 190 605 |
| **Serial Cable**<br>RS-232, 3 m; for serial number as of xxxx-0999 | 190 200 |
| **Purge Filter Assembly for APC Portable** | 942 426 |
| **Table-top Tripod** | 191 595 |
| **Thermal Printer Paper**<br>5 rolls | 942 110 000 |
| **Isokinetic Probe, 28.3 l/min** | 942 439 |
| **Isokinetic Probe for HEPA filter testing, 28.3 L/min** | 191 522 |
| **Carrying Case**<br>With wheels and handle | 942 456 000 |
| **APC Compressed Gas Adapter**<br>Compatible with all APC models | 942 675 |
| **Nozzle Set for APC Compressed Gas Adapter, 28.3 L/min** | 942 665 |
| **APCOne11 Download Utility Software**<br>Compatible with 21 CFR Part 11, including Download Utility Software (CD), APCOne11 security dongle, APCOne11 Validation handbook | 942 700 |
| **APCOne11 Security Dongle** | 942 162 |
| **APCOne11 Download Utility Software** | 942 701 |
| **APC Portable Qualification Handbook**<br>For performing complete IQ, OQ and PQ of APC Portable Airborne Particle Counter, available in German and English | 942 407 |

## MMB Food Pathogen System

The MMB Food Pathogen System is designed for fast and reliable real-time PCR detection of food pathogens. It consist of a preparation kit for isolation of nucleic acids and a real-time PCR kit. The fail-safe analysis of bacterial cultures (pre-enrichment) or food samples can be done within a few hours.

PCR kits are available for all common real-time PCR instruments using the FAM channel (522 nm) for detection of the pathogen-specific probe and device-specific detection channels for the internal amplification control:

### Instruments

| Instrument | VIC (V) 553 nm | ROX (R) 602 nm | LC (F2) 640 nm |
|---|---|---|---|
| Applied Biosystems ABI 7000, 7300, 7500 7700, 7900 SDS, StepOne | x | | |
| BioRad iCycler | | x | |
| BioRad iQ5 | | x | |
| Roche LightCycler 1.5 | | | x |
| Roche LightCycler 2.0 | | | x |
| Roche LightCycler 480 | | x | |
| Eppendorf ep realplex$^2$ | x | | |
| Eppendorf ep realplex$^4$ | x | | |
| Stratagene MxSeries | x | | |
| QIAGEN Rotor-Gene Q (former Corbett Research RotorGene ) | x | | |

### MMB Food Pathogen Prep Kits for the isolation of bacterial or viral DNA

MMB Food Pathogen Prep Kits are optimized for DNA purification from bacterial cultures or food samples (pre enrichment). The isolated DNA is ready-to-use for a detection reaction with a suitable MMB Food Pathogen Detection Kit. High efficiency yields of quality DNA guarantee highest sensivity and accurate results.

| *Item* | *Item No.* |
|---|---|
| **MMB Bacteria Prep Kit** (100 preparations) | 944 501 |
| **MMB Salmonella Prep Kit** (100 preparations) | 944 505 |
| **MMB Campylobacter Prep Kit** (100 preparations) | 944 511 |
| **MMB Listeria Prep Kit** (100 preparations) | 944 515 |
| **MMB E. coli Prep Kit** (100 preparations) | 944 521 |
| **MMB DNA/RNA Virus Prep Kit** (100 preparations) | xxx xxx |

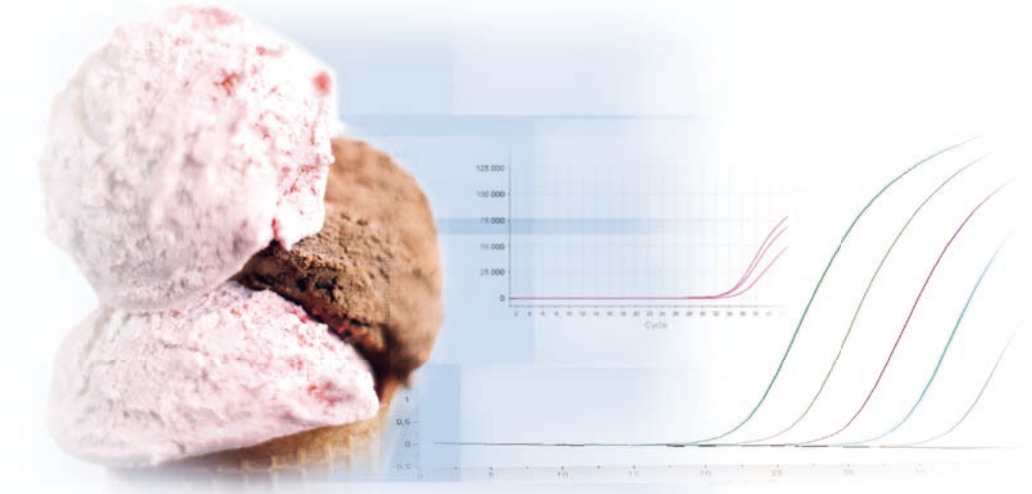
### MMB Food Pathogen Detection Kits for real-time PCR detection

MMB Food Pathogen Detection Kits use the principle of real-time PCR as a very sensitive and specific detection method. The internal amplification control leads to reliable results. The kits conform to methods according to §64 LFGB and the corresponding ISO / EN / DIN standards.

| | |
|---|---|
| **MMB Salmonella (V) Kit** (100 reactions) | 944 011 |
| **MMB Salmonella (R) Kit** (100 reactions) | 944 012 |
| **MMB Salmonella (LC) Kit** (100 reactions) | 944 013 |
| **MMB Campylobacter (V) Kit** (100 reactions) | 944 021 |
| **MMB Campylobacter (R) Kit** (100 reactions) | 944 022 |
| **MMB Campylobacter (LC) Kit** (100 reactions) | 944 023 |
| **MMB Listeria monocytogenes (V) Kit** (100 reactions) | 944 031 |

## MMB Food Pathogen System

| Item | Item No. |
|---|---|
| **MMB Listeria monocytogenes (R) Kit** (100 reactions) | 944 032 |
| **MMB Listeria monocytogenes (LC) Kit** (100 reactions) | 944 033 |
| **MMB Listeria Screening (V) Kit** (100 reactions) | 944 061 |
| **MMB STEC Screening (V) Kit** (100 reactions) | 944 041 |
| **MMB STEC Screening (R) Kit** (100 reactions) | 944 042 |
| **MMB STEC Screening (LC) Kit** (100 reactions) | 944 043 |
| **MMB Staphylococcus aureus (V) Kit** (100 reactions) | 944 051 |
| **MMB Vibrio cholerae (V) Kit** (100 reactions) | 944 071 |
| **MMB Legionella pneumophila (V) Kit** (100 reactions) | 944 081 |
| **MMB Clostridium perfringens (V) Kit** (100 reactions) | 944 091 |
| **MMB Bacillus cereus (V) Kit** (100 reactions) | 944 101 |
| **MMB Norovirus (V) Kit** (100 reactions) | xxx xxx |



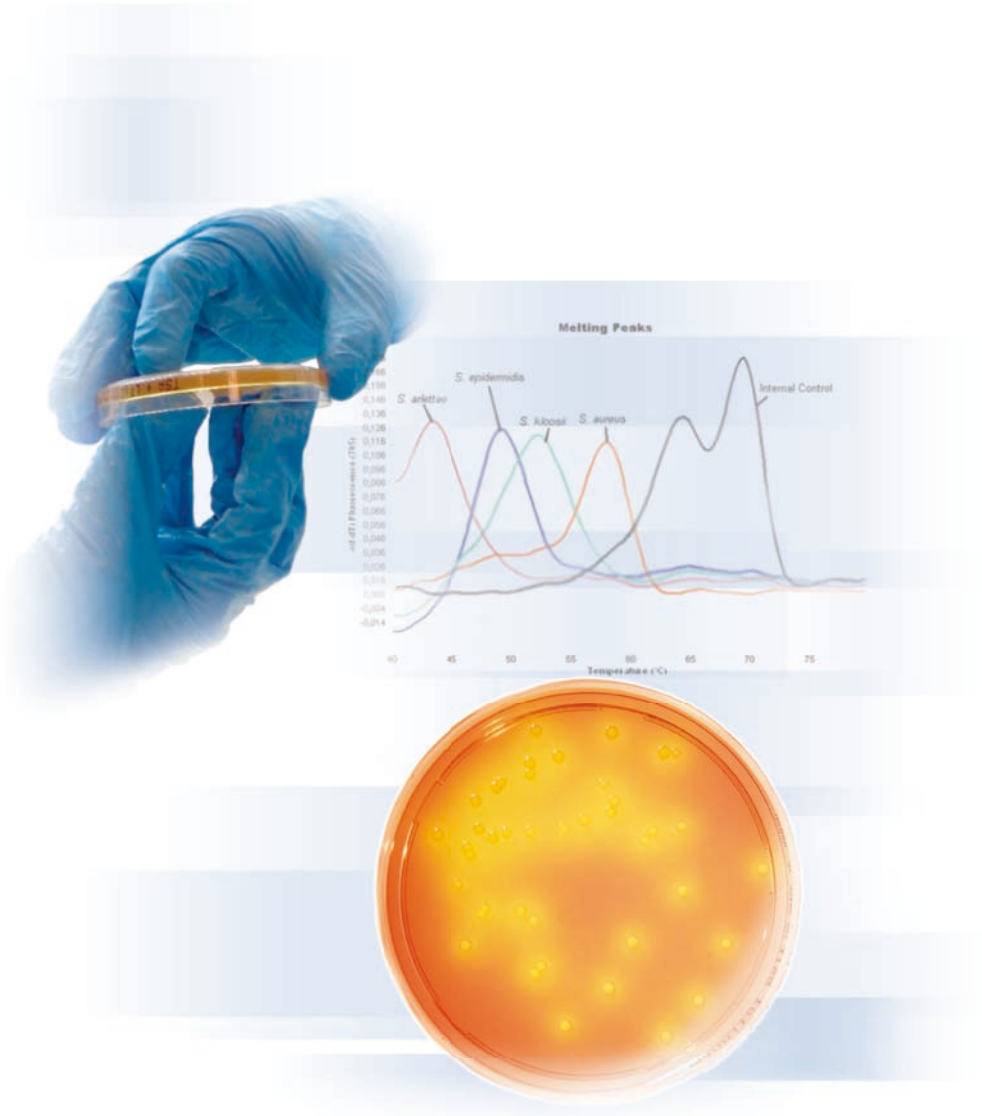
## Hygiene Screening System (HSS)

The Hygiene Screening System is designed for the rapid identification of microorganisms of the genera Corynebacterium, Staphylococcus, Macrococcus, Micrococcus, Kocuria, and Kytococcus. Additionally, some coryneform bacteria and Nesterenkonia halobia are detected.

The system is optimized for the LightCycler® 2.0 (Roche Diagnostics). The system uses highly specific HybProbe probes for the simultaneous detection of all the above mentioned genera within 90 minutes. In addition, the most important species and species groups within these genera can be identified via melting curve analysis.

Bacterial colonies as starting material are are prepared using the Suspension Buffer. This buffer allows the preparation of target DNA templates in less than 5 minutes followed by a qualitative real-time PCR analysis using highly specific HybProbe probes.

| *Item* | *Item No.* |
|---|---|
| **Hygiene Screening System Hybridization Probes**<br>96 reactions | 943 101 |
| **Suspension Buffer**<br>800 tests | 943 102 |
| **Enzyme Mix**<br>200 U Taq Polymerase/UNG; 96 reactions | 943 103 |



## Service, Repair and Calibration

| Item | Item No. |
|---|---|
| *HYCON RCS Microbial Air Samplers* | |
| **Calibration**<br>RCS High Flow / RCS Isolator / RCS Plus (Ex) / RCS Standard | 940 006 |
| **Calibration**<br>Anemometer | 940 007 |
| **Hourly Rate for Service and Repair** | 940 001 |
| *HYCON APC Particle Counter* | |
| **Calibration**<br>APC M3, APC Portable | 942 981 |
| **Calibration**<br>APC ErgoTouch, APC ErgoTouch Pro, APC Handheld | 942 982 |
| **Calibration**<br>Sensor for temperature and relative humidity | 1.5 hours |
| **Calibration**<br>Air velocity sampling probe | 1.5 hours |
| **Calibration**<br>Differential pressure sensor | 1.5 hours |
| **Hourly Rate for Service and Repair** | 940 001 |
| *Special Service* | |
| **Shipping**<br>only within Germany | |
| **Qualification Service**<br>RCS High Flow / APC M3/ APC ErgoTouch Pro/ APC Handheld/ APC Portable | upon request |

## Contact

### Customer Service:

**Biotest AG**
Landsteinerstraße 5
63303 Dreieich
Germany

Phone 0 800 9 42 56 26 (only within Germany)
Phone +49 (0) 61 03 80 14 96
Fax 0 800 9 97 80 00 (only within Germany)
Fax +49 (0) 61 03 80 15 05

E-mail mail@biotest.de

### Technical Support:

**Biotest AG**
**Technology Center Microbiology**
Wernher-von-Braun-Straße 9
69214 Eppelheim
Germany

Phone +49 (0) 62 21 7 26 51 30
Fax +49 (0) 62 21 7 26 51 39

E-mail hycon@biotest.de

### Service, Repair, Calibration:

**Biotest AG**
**Technology Center Microbiology**
Wernher-von-Braun-Straße 9
69214 Eppelheim
Germany

Phone +49 (0) 62 21 7 26 51 41
Fax +49 (0) 62 21 7 26 51 49

E-mail hyconservice@biotest.de

# Biotest AG General Terms and Conditions

## 1.Scope of Application and Definitions

1.1 The Biotest General Terms and Conditions (Terms and Conditions) shall govern all interactions and transactions between Biotest and the customer (the two parties). These Terms and Conditions, therefore, shall also apply to all future transactions and interactions between the two parties without explicitly entering into any additional agreements. These Terms and Conditions shall be deemed accepted upon the receipt of our goods and/or services, at the latest. Any unilateral conditions such as, but not limited to, will not be accepted by Biotest.

1.2 Any changes to these Terms and Conditions must be confirmed by Biotest in writing.

1.3 The words “us”, “our”, “ours” shall mean “Biotest“, the words “you”, “your”, “yours” shall mean “the customer”.

## 2.Validity of Contracts

2.1 Any offers contained in brochures, advertisements, price lists etc. are without any commitment and subject to change without notice, including but not limited to price quotations. Any samples, illustrations etc., as well as all details of the performance data, shall only be binding if expressly specified. We will be bound by individual offers for the period specified in the offer, or, if not specified therein, for a period of 30 calendar days.

2.2 Each order must be confirmed by us in writing to be valid.

2.3 Any side agreements, amendments or supplements shall only be valid if confirmed by us in writing.

## 3. Delivery, Prices, Changes in prices

3.1 Delivery conditions shall be FCA Dreieich (Incoterms 2000). To avoid quality problems and damages of the goods the customer is obliged to entrust one of our recommended forwarding agents.

3.2 All prices are net prices exclusive of VAT and any duties, which shall be paid by the customer at its statutory rate from time to time, if applicable.

3.3 We reserve the right not to accept orders below 500 €. If the single invoice value is below € 1,000 for diagnostic products, an additional handling fee of € 150 will be charged per invoice of diagnostic products. If the single invoice value is below € 5,000 for therapeutic products, an additional handling fee of € 250 will be charged per invoice of therapeutic products.

3.4 Shipping charges for same day deliveries or outside regular working hours (courier fees etc.) shall be borne by the customer.

3.5 € 70 will be charged for each delivery containing solid carbon dioxide (dry ice).

## 4. Delivery times

4.1 While it is our goal to always meet the specified delivery dates, they cannot be promised.

4.2 We shall not be liable for any delays in delivery as a result of force majeure or other events that render the delivery materially more difficult or impossible - including but not limited to, subsequent difficulties in the procurement of materials, operational breakdowns, strikes, lock-outs, shortage of staff or means of transport, governmental action etc, even if any such events occur with our suppliers or their sub-contractors, as well as in the event of time limits and dates agreed in a binding manner. We shall be entitled as a result of any such delays to postpone the delivery by the duration of the hindrance plus a reasonable starting period or to withdraw from the contract in whole or in part with respect to the portion not yet performed. This applies also if we are already in default.

4.3 If the hindrance persists for a period of more than three months, the customer shall be entitled, after setting a reasonable additional time limit, to withdraw from the contract with respect to the portion not yet performed.

4.4 If we are in default, the customer may withdraw from the contract after the expiration of an additional time limit. The term of the additional time limit to be set by the customer by law shall be six weeks. The time limit starts upon the receipt by us of the notification of the setting of the additional time limit.

4.5 The extended liability during default (§ 287 German Civil Code) is excluded.

4.6 We shall at any time be entitled to ship partial deliveries.

## 5. Transfer of risk

The risk shall transfer to the customer once the consignment is handed over to the person carrying out the transport, or has left our plant or distribution centre, respectively, for shipment. If it becomes impossible to ship for reasons other than our own fault, the risk shall transfer to the customer upon notification of the readiness for shipment.

## 6. Warranty and duty to examine

6.1 Any details in brochures, price lists and other information as well as product-describing information sent to the customer by us, shall in no event be interpreted as being warranties for a specific quality of the delivered item; any such warranties as to quality must be expressly agreed upon in writing.

6.2 Notwithstanding warranty claims (if any) under the provisions below, the customer shall also accept a delivered item with minor defects.

6.3 If the delivered item is defective or becomes defective within the product shelf life or - if no shelf life is specified - within the warranty period as a result of manufacturing defects or defects in material, we shall at our own option deliver a replacement item or remediate the defect. The limitation period for warranty claims is 12 months from the time of the transfer of risk.

6.4 The customer shall notify us of any defects in writing without undue delay, and no later than one week following delivery, enclosing the delivery note and - if possible - a sample. Any defects that cannot be discovered within such period even after careful examination shall be notified to us in writing without undue delay following their discovery.

6.5 If the storage and/or transport instructions as printed on the packaging of our products are not observed, all liability on our part shall cease. The burden of proof with regard to proper storage shall lie with the customer.

6.6 The scope of our warranty for replacement deliveries and remedying defects corresponds to the scope of our warranty for the original delivered item.

6.7 We shall be available to the customer for inquiries and advice to the best of our knowledge in respect of the use of the products. We shall, however, only be liable pursuant to section 7 below in such case that separate remuneration is agreed upon therefor.

## 7. Damages and limitation of liability

7.1 We shall be liable for damages:

a) for culpably caused damage to life, limb and health;

b) to the extent that we have assumed a warranty for a special quality of the delivered item or performance, our capability to procure the same, or

## Biotest AG General Terms and Conditions

any other warranty, provided that damage is incurred as a result of a non-fulfilment of such warranty;

c) on account of damage caused in a wilful or grossly negligent manner by us or our agents;

d) in lieu of complete performance on account of culpable defective deliveries or services in the event of material breaches of duty;

e) in the event of a slightly negligent violation of material contractual duties, limited, however, to the typical and foreseeable damage;

f) in accordance with the provisions of the German Drug Law, the German Product Liability Act, and any other mandatory statutory provisions on liability;

g) in lieu of performance on account of a culpable breach of collateral duties, if the customer can no longer reasonably be expected to accept the performance, or if the delivery or service by us is rendered impossible.

7.2 If none of the criteria specified in section 7.1 above is met, we shall not be liable for damages. Any exclusions or limitations of liability shall also apply to our employees.

7.3 Sections 7.1 and 7.2 above apply to all claims for damages on any legal grounds whatsoever, including but not limited to, the liability for tort or culpa in contrahendo.

7.4 The customer shall take appropriate action to avert and minimise damage.

7.5 In case of product liability claims brought forward to the customer, the customer shall immediately inform us and, to the best of its abilities, cooperate with us in the defence of such claims.

### 8. Retention of title

8.1 Pending the satisfaction of all claims (including claims with respect to account balances) that we may have against the customer and its group companies now and in the future on any legal grounds whatsoever, as well as pending the complete indemnification against any and all contingent liabilities assumed by us in the customer's interest, the following security shall be furnished to us. It shall be understood that we will release the security at our own option, once its value persistently exceeds the value of the claims by more than 20%:

8.2 Title to the goods shall remain with us. Any processing or transformation shall at all times be made for us as manufacturer, with us, however, not being obliged in any manner. If our (co-)ownership expires as a result of a combination, it is hereby agreed that the customer's (co-)ownership of the uniform object passes to us in the proportion of the value (invoice value). The customer shall keep our (co-)ownership free of charge. Any goods to which we are entitled (co-)ownership are hereafter referred to as "conditional goods".

8.3 The customer may process conditional goods in the ordinary course of business and sell them subject to a reservation of title, provided that the customer is not in default. Any pledging or assignment as security shall not be admissible. The customer hereby assigns to us by way of security all claims arising from the resale or any other legal grounds (insurance, tort) in respect of conditional goods. We hereby revocably authorise the customer to collect the claims assigned to us in its own name and for our account. If requested by us, the customer shall disclose the assignment and provide us with the necessary information and documents.

8.4 If third parties encroach upon conditional goods, the customer shall refer to our title and notify us without undue delay. Any costs and damage shall be borne by the customer.

8.5 In the event of a breach of contract by the customer, including but not limited to, default in payment, we may take back the conditional goods at the customer's expense. The taking back or attachment of conditional goods by us shall not constitute a withdrawal from the contract.

### 9. Payment

9.1 Our invoices are payable as specified in our offer, or, if not specified, within 30 days from receipt of the invoice or the respective delivery of goods without any deductions; following the expiration of such time limit without payment, the customer is in default. The payment date shall be the date on which we receive the funds. Notwithstanding any provisions of the customer to the contrary, we shall be entitled to determine the claims against which the payment shall be set off.

9.2 We expressly reserve the right to refuse to accept cheques and bills of exchange. Acceptance shall in any event only be on account of payment. Discount and bill fees shall be due immediately at the expense of the customer.

9.3 If the customer is in default, we may charge interest at a rate of 8 percentage points above the base rate published by Deutsche Bundesbank from time to time. The interest shall be due immediately. We reserve the right to assert additional damages.

9.4 We will charge a lump-sum amount of € 5 (respectively 6 US-$) for each written reminder following the occurrence of the default in payment of an invoice in € (respectively in US-$ or any other currency.)

9.5 If the customer fails to comply with its payment obligations and, in particular, fails to honour a cheque or bill of exchange, stops payments, or if we realise otherwise following the conclusion of the contract that our claim for payment is jeopardised due to a lack of financial strength or liquidity of the customer, we may declare all of our claims against the customer immediately due and payable, even if we have accepted cheques or bills of exchange. We may in such case also suspend deliveries, demand advance payments or the furnishing of security and may further withdraw from the contract following the expiration of a reasonable additional time limit and claim damages, if applicable.

9.6 The customer shall only be entitled to set-offs or deductions if we have given our express written consent or if the counterclaims are undisputed and have become res judicata.

### 10. Termination or withdrawal for good reason

10.1 We can terminate the contract or withdraw from the contract for good reason, particularly in cases where the customer has filed for insolvency or has permanently stopped payments or where insolvency proceedings have been initiated with regard to the assets of the client or where initiation of such proceedings has been declined for insufficiency of assets.

### 11. Place of jurisdiction; Applicable law; Partial invalidity

11.1 It is agreed that Frankfurt am Main is the place of jurisdiction for any disputes for both parties. The same applies if the residence or habitual abode of the customer is not known at the time when an action is brought. We may, however also institute legal action against the customer at the customer´s general place of jurisdiction.

11.2 These Terms and Conditions are governed exclusively by the laws of the Federal Republic of Germany.

11.3 Should any of the provisions of these Terms and Conditions, or a provision within the scope of any other agreements, be or become ineffective, the validity of all other provisions or agreements shall not be affected. Rather, both parties together shall replace an ineffective provision by an effective provision that comes closest, to the extent legally admissible, to the economic intent and purpose of the ineffective provision.

Biotest

*From Nature for Life*

**Biotest AG**
**Global Business Unit Microbiology**

698900101